

AMENDMENTS TO THE CLAIMS

1-5. (Cancelled).

6. (Previously Presented) An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO:1.

7-42. (Cancelled)

43. (Previously Presented) An isolated nucleic acid comprising a nucleotide sequence coding for the amino acid sequence of SEQ ID NO:2.

44-77. (Cancelled)

78. (Currently Amended) An isolated nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule. ~~The nucleic acid according to claim 52,~~ wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) ~~a~~ the nucleotide sequence of SEQ ID NO:1, and
- (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;
- (c) ~~a nucleotide sequence of SEQ ID NO:3,~~ and
- (d) ~~a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.~~

79. **(Currently Amended)** A chimeric gene comprising a nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule,~~The chimeric gene according to claim 59,~~ wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) ~~a~~the nucleotide sequence of SEQ ID NO:1, and
- (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;
- (c) ~~a~~ nucleotide sequence of SEQ ID NO:3, and
- (d) ~~a~~ nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.

80. **(Currently Amended)** A plasmid comprising a nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule,~~The plasmid according to claim 65,~~ wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) ~~a~~the nucleotide sequence of SEQ ID NO: 1, and
- (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;
- ~~— (c) a nucleotide sequence of SEQ ID NO:3, and~~
- ~~— (d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.~~

81. **(Currently Amended)** A method for metabolic modification, which comprises introducing a nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule,~~The method for metabolic modification according to claim 73,~~ wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) ~~a~~the nucleotide sequence of SEQ ID NO:1, and
- ~~(b)~~a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;
- ~~(c)~~a nucleotide sequence of SEQ ID NO:3, and
- ~~(d)~~a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.

82. – 86. (Cancelled)